An Analysis of

An Economic Report to the Governor of the State of Tennessee

A Report to the State Funding Board

prepared by

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Office of Research
Comptroller of the Treasury

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Introduction

Each year the Center for Business and Economic Research (CBER) at the University of Tennessee publishes *An Economic Report to the Governor of the State of Tennessee*. The report contains forecasts for key economic variables and commentary on the extent to which changes in these variables may affect local, state and national economies. CBER uses the national economic forecasts of Wharton Econometric Forecasting Associates (WEFA) for its national-level data and derives the forecast and analysis for Tennessee from the Tennessee Econometric Model (TEM). In addition, it applies three other models in the development of the agricultural component of the Tennessee economic forecasts.

Statute requires the Tennessee State Funding Board to comment on the reasonableness of the forecasted growth rate of the state's economy, as measured by the growth rate of nominal personal income in Tennessee. (Appendix A) The State Funding Board uses the forecasted growth rate as a basis for determining the potential increase in appropriations from state tax revenues for the next fiscal year. The purpose of this analysis is to assist the Tennessee State Funding Board in its consideration of CBER's forecasts for the Tennessee economy in 2002 by highlighting, elaborating on, and critiquing various points in CBER's report.

The next two sections summarize CBER's forecasts for the U.S. economy (based on the WEFA forecasts) and the Tennessee economy, presenting those forecasts within the context of other related economic trends and predictions. The concluding sections highlight some key issues raised both by the CBER report and by other observations of the state's economy.

U.S. Forecast

Gross Domestic Product
CBER's forecast for average nominal gross domestic product (GDP) growth in 2002 is 2.1 percent. This forecast is on the low end of the spectrum of sampled forecasts, one and a half percentage points below the average of the forecast sample.

CBER's estimate for average real (i.e., inflation-adjusted) GDP growth for 2001 is 1.1 percent, expected to decline to 0.4 percent in 2002 and then rise again to 4.4 percent in 2003. After negative growth in the first quarter of 2002, CBER expects growth to accelerate throughout the rest of the year.

Forecast Comparison: 2002 Nominal GDP Growth		
Agency	**Rate**	**Forecast Date**
Fannie Mae	5.0%	3/02
Northern Trust	4.7%	4/02
Michigan-RSQE	3.7%	3/02
Wachovia	3.5%	4/02
CBO	3.1%	3/02
Philadelphia FRB	3.0%	2/02
CBER (WEFA)	**2.1%**	**12/00**
Forecast Average	3.6%	
Forecast Range: Low	2.1%	
Forecast Range: High	5.0%	

Exhibit 1

As with nominal GDP growth, CBER's estimate of real GDP growth appears low. According the Department of Commerce, Bureau of Economic Analysis, actual annualized real GDP growth in the fourth quarter of 2001 was 1.7 percent, well above CBER's estimate of -1.6 percent. Sampled forecasts uniformly predicted sustained positive real GDP growth in each quarter of 2002. If growth does in fact continue throughout the year, real GDP growth will exceed CBER's forecast.

Real GDP Growth by Quarter: 2001-02 (96$) CBER (WEFA) Forecast						
2001 Avg.	**2001 Q4**	**2002 Q1**	**2002 Q2**	**2002 Q3**	**2002 Q4**	**2002 Avg.**
1.1%	-2.1%	-1.6%	2.5%	3.8%	5.1%	**0.4%**

Exhibit 2

Inflation In 2002, CBER expects a 1.6 percent rate of inflation as measured by the Implicit GDP Deflator, and 1.4 percent as measured by the Personal Consumption Deflator. These numbers reflect a trend in recent years toward more stable prices and are low by historic standards.

CBER's forecast for the Implicit GDP Deflator is just slightly above the average among the sampled forecasts (shown on Exhibit 3). According to CBER, the Implicit GDP Deflator was 2.3 percent in 2001 while the Personal Consumption Deflator was 1.9 percent. CBER projects an Implicit GSP Deflator of 2.0 percent for Tennessee in 2002, well above the U.S. Implicit GDP Deflator.

Forecast Comparison: 2002 Inflation (GDP Deflator)		
Agency	**Rate**	**Forecast Date**
Northern Trust	1.8%	4/02
CBER (WEFA)	**1.6%**	**12/01**
CBO	1.4%	3/02
Fannie Mae	1.4%	3/02
Philadelphia FRB	1.4%	2/02
Michigan-RSQE	1.1%	3/02
Forecast Average	1.5%	
Forecast Range: Low	1.1%	
Forecast Range: High	1.8%	

Exhibit 3

Unemployment Rate and Job Growth The CBER forecast for U.S. unemployment in 2001 and 2002 are 4.8 percent and 6.2 percent, respectively. CBER expects unemployment to fluctuate between 5.0 percent and 5.8 percent from 2003 until the end of the decade. As with CBER's nominal GDP growth forecast, CBER's forecast of 6.2 percent for U.S. unemployment in 2002 is more pessimistic than other sampled forecasts.

Forecast Comparison: 2002 Unemployment Rate		
Agency	**Rate**	**Forecast Date**
CBER (WEFA)	**6.2%**	**12/01**
CBO	6.1%	3/02
Philadelphia FRB	6.0%	2/02
Fannie Mae	5.7%	3/02
Wachovia	5.7%	4/02
Michigan-RSQE	5.5%	3/02
Northern Trust	5.5%	4/02
Forecast Average	5.8%	
Forecast Range: Low	5.5%	
Forecast Range: High	6.2%	

Exhibit 4

Tennessee Forecast and Recent Trends

Gross State Product CBER projects Tennessee's real gross state product (GSP) to have increased 1.4 percent in 2001, as compared to just under 1.1 percent for U.S. GDP. This projected GSP growth rate in Tennessee is a significant decrease from 4.8 percent growth in 2000. CBER forecasts that Tennessee real GSP growth will continue to slow in 2002, with real GSP increasing 1.2 percent. CBER's forecasted U.S. GDP growth rate in 2002 is 0.4 percent.

Annual Real GSP Growth: 2000-2002 (96$) CBER Forecast		
2001	**2002**	**2003**
1.4%	1.2%	2.8%

Exhibit 5

Per-capita real GSP growth in Tennessee is expected to slow as well, from 0.3 percent in 2001 to 0.2 percent in 2002. From that point, CBER projects Tennessee per-capita GSP growth will increase to 1.7 percent in 2003 and remain above 2 percent for the remainder of the decade. CBER forecasts Tennessee per-capita real GSP growth will average 2.6 percent from 2004 to 2010, compared to the U.S. average per-capita real GDP forecast of 2.2 percent for that period.

Nominal Personal Income CBER expects nominal personal income in Tennessee to increase 4.2 percent in 2002 compared to 2.6 percent for the nation as a whole. CBER projects wages and salaries will be the slowest-growing component of personal income at 3.4 percent. However, according to CBER forecasts, nominal wages and salaries should grow over 5 percent for the remainder of the decade. Since that component comprises nearly 60 percent of total personal income, and since the second largest component of personal income (transfer payments) is expected to experience significant growth

Forecasted Tennessee Nominal Personal Income Growth: 2002 CBER Forecast	
Wages and Salaries	3.4%
Other Labor Income	3.8%
Proprietors' Income	4.6%
Rent, Interest & Dividends	5.4%
Transfer Payments	5.2%
Total	**4.2%**

Exhibit 6

as well, the CBER forecasts show a fairly steady increase in personal income over the coming decade. CBER projects overall nominal personal income growth will average over 6 percent per year through 2010.

Other Measures of Personal Income CBER also forecasts growth estimates for other measures of personal income. For the purposes of projecting the capacity of income growth to support (through taxes) the state's fiscal needs, it makes sense to examine per-capita real personal income growth. Nominal personal income shows the actual dollars in personal income in Tennessee; real personal income adjusts this number to account for inflation. Per-capita personal income divides total personal income by Tennessee's population to show the average amount of personal income for each person. Exhibit 7 shows that per-capita real personal income growth is projected to continue at 1.6 percent from 2001 to 2002.

Different Measures of Tennessee Personal Income Growth **CBER Forecast**		
Measure	*2001*	*2002*
Nominal personal income growth	4.7%	4.2%
Real personal income growth	2.7%	2.7%
Real per-capita personal income growth	1.6%	1.6%

Exhibit 7

CBER projects that that U.S. real per-capita personal income will shrink in 2002. If that occurs, it would be the first time since 1995 that Tennessee's real per-capita personal income growth outpaced that of the nation as a whole. Tennessee's growth rate exceeded the national growth rate from 1991 to 1995. During those years, Tennessee was "catching up" to the rest of the nation. However, Tennessee's growth rate has fallen below the U.S. growth rate every year since then. Thus, Tennessee per-capita personal income has fallen further behind the national level. Exhibit 8 shows CBER data for real per-capita personal income in Tennessee compared to national per-capita personal income; Exhibit 9 shows real per-capita personal income growth for both areas.

Exhibit 8: Real Per-Capita Personal Income

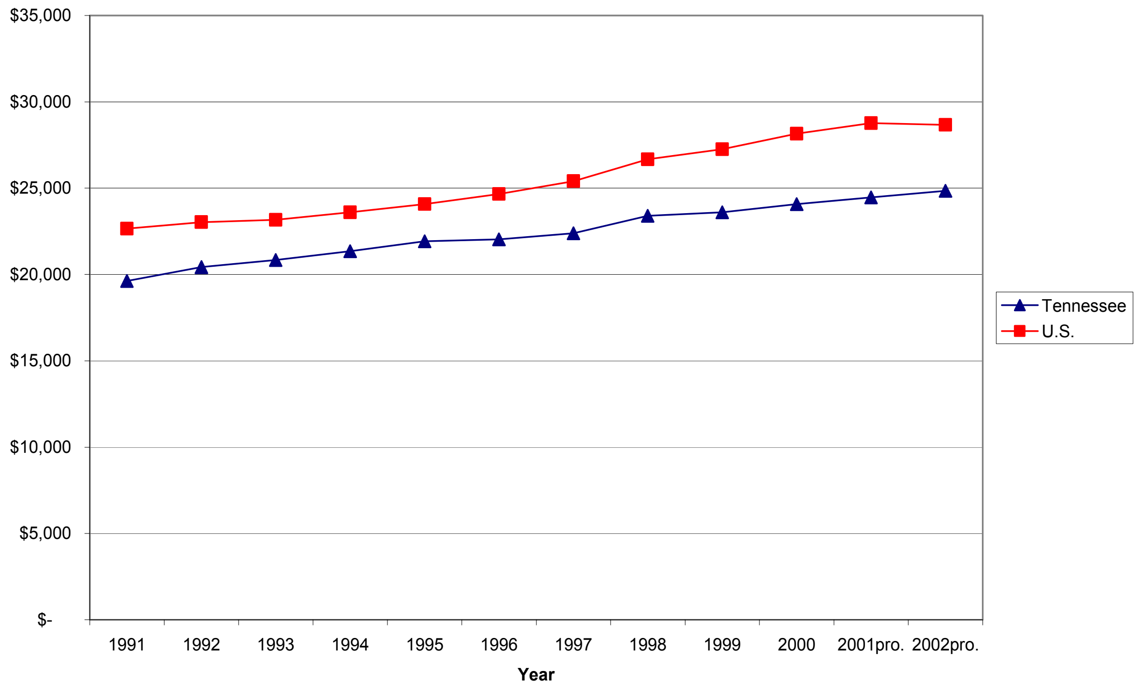
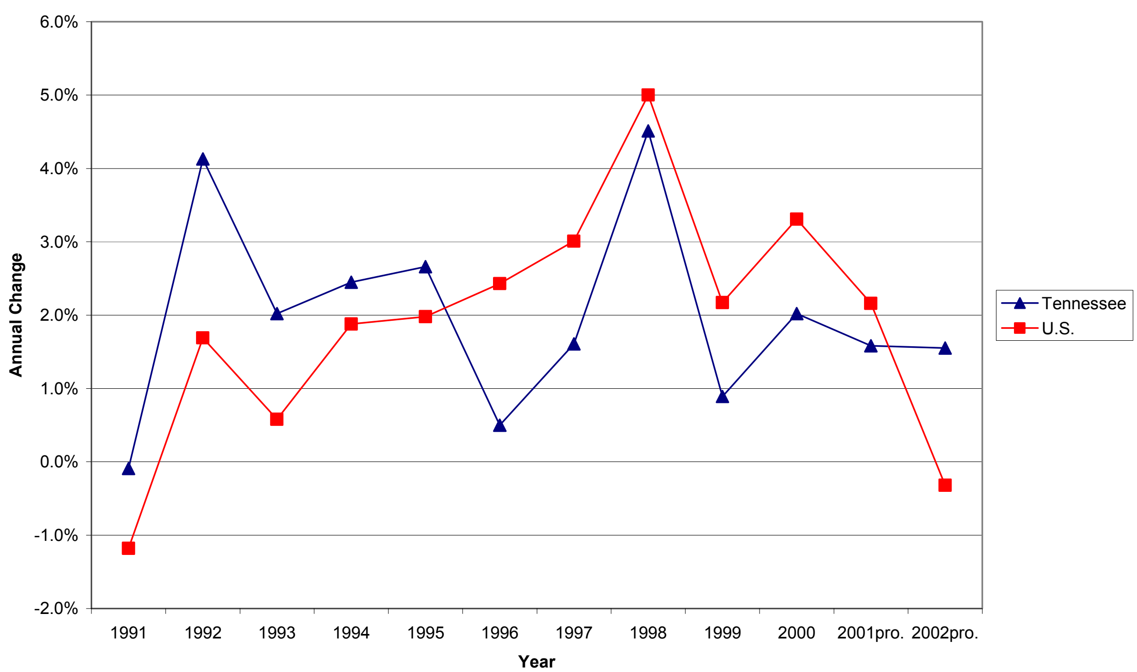


Exhibit 9: Real Per-Capita Personal Income Growth



Source: University of Tennessee, Center for Business and Economic Research

The U.S. Department of Commerce collects annual nominal personal income data. Exhibit 10 shows that, after experiencing faster growth than the rest of the Southeast in the early 1990s, Tennessee's income growth has fallen behind the regional rate as well. Exhibit 11 shows per-capita personal income by county in Tennessee for 1999, the most recent year for which county-level data is available.

Exhibit 10: Nominal Per-Capita Personal Income Growth

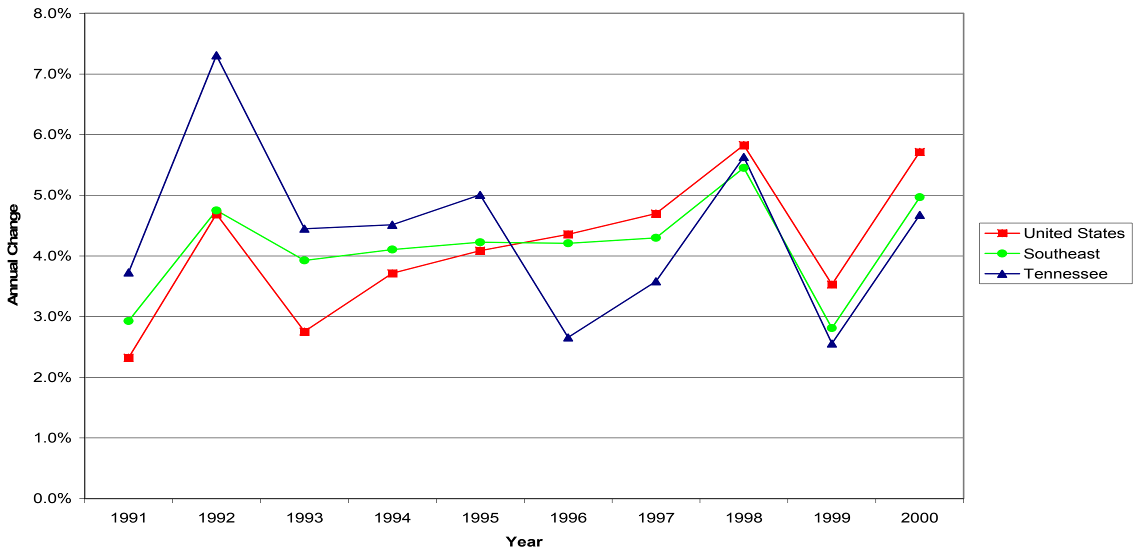


Exhibit 11: 1999 Per-Capita Personal Income

Source: U.S. Department of Commerce, Bureau of Economic Analysis

Sales Tax Base and Collections[1] Per-capita taxable sales growth is generally somewhat erratic. CBER projects 0.5 percent nominal total taxable sales growth and -0.9 percent real taxable sales growth in 2002. Per-capita nominal taxable sales are projected to shrink 0.6 percent in 2002 while per-capita real taxable sales shrink 2.0 percent.

Different Measures of Tennessee Taxable Sales Growth **CBER Forecast**		
Measure	*2001*	*2002*
Nominal taxable sales growth	-0.1%	0.5%
Inflation-adjusted taxable sales growth	-2.0%	-0.9%
Inflation-adjusted per-capita taxable sales growth	-3.1%	-2.0%

Exhibit 12

Income elasticity of taxable sales is a common measure of how well sales tax growth tracks income growth. An elasticity of 80 percent would mean that if personal income increased $100, taxable sales would increase $80. The combination of CBER's forecasts for nominal personal income growth and nominal taxable sales growth suggests an income elasticity of taxable sales of -3 percent for 2001. CBER projects the elasticity to increase to 13 percent for 2002, 63 percent for 2003, and 110 percent in 2004. After that, elasticity will return to normal levels around 85 percent for the rest of the decade.

One important reason for low elasticity is the erosion of the sales tax base as a result of electronic commerce. CBER estimated that in 2001 Tennessee lost 1.8 percent of its total state tax revenue to electronic commerce, and that number is expected to rise to 5.0 percent in 2006. It would take a 0.9 cent increase in the sales tax rate just to make up losses projected for 2006.[2]

The general sales tax accounts for more than half of total state tax collections each year and provides a significant source of local revenue for schools and other services. Exhibit 13 shows per-capita state sales

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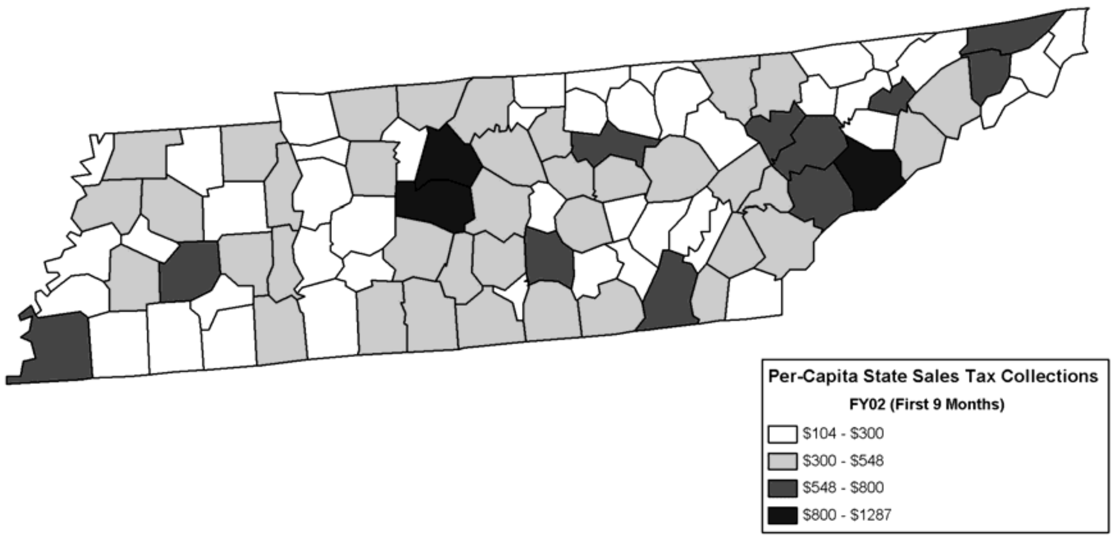
[1] Notice the distinction between taxable sales and sales tax collections here. Ideally, the taxable sales times the sales tax rate should yield sales tax collections. However, the two are not exactly correlated, since there are refund, credit, and exemption issues, in addition to data collection disparities and imperfect tax collections (e.g., from border leakage), that may differentiate the two measures.

[2] Donald Bruce and William F. Fox, "State and Local Sales Tax Revenue Losses from E-Commerce: Updated Estimates," Center for Business and Economic Research, University of Tennessee, September 2001.

tax revenues by county for the first nine months of fiscal year 2002. As was the case in previous years, Sevier and Davidson counties had the highest per-capita sales tax collections in the state, with 235 percent and 168 percent, respectively, of the statewide average of $548. Morgan County had the state's lowest per-capita sales tax collections at 19 percent of the state average.

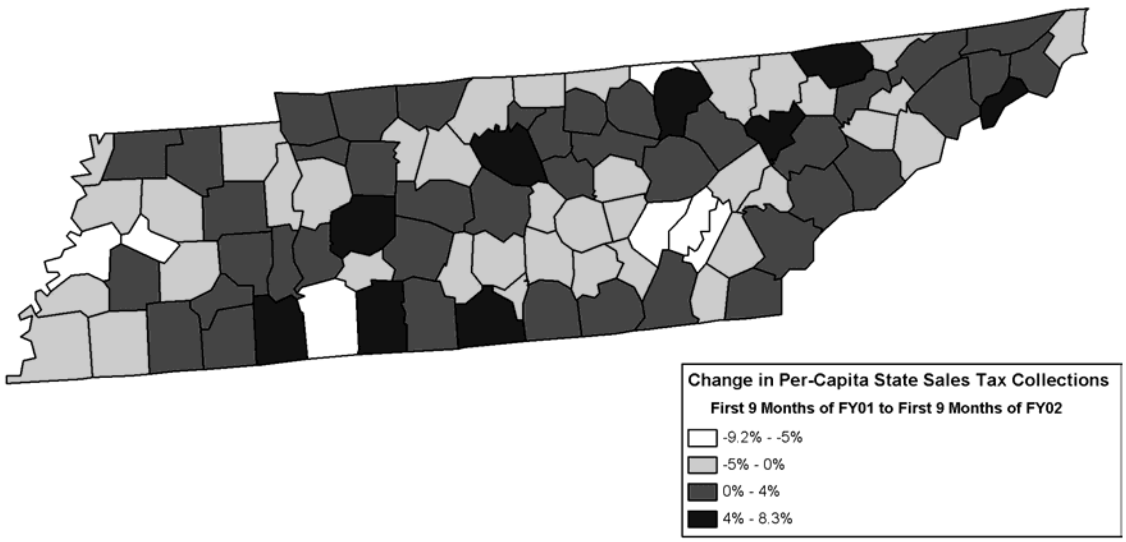
Exhibit 13: Per-Capita State Sales Tax Collections



Sources: U.S. Department of Commerce, Bureau of the Census and Tennessee Department of Revenue

In comparing the first nine months of fiscal year 2002 with the first nine months of fiscal year 2001, per-capita sales tax revenues declined 0.9 percent statewide. Exhibit 14 shows the distribution of the change in state sales tax revenues across Tennessee counties. Anderson County experienced the greatest per-capita sales tax growth (8.3 percent) while Meigs County experienced the greatest decline (9.2 percent).

Exhibit 14: Change in Per-Capita State Sales Tax Collections



Sources: U.S. Department of Commerce, Bureau of the Census and Tennessee Department of Revenue

Unemployment Rate and Job Growth The mild recession of 2001 ended nine years of strong job growth for both Tennessee and the nation. Exhibit 16 shows recent unemployment rates for Tennessee and the nation. Tennessee maintained unemployment rates well below the national average throughout the latter half of 2001, but in recent months the gap has narrowed. However, this is not necessarily cause for concern. The terrorist attacks of September 2001 disrupted several major industries, including the airline and hotel industries. These industries comprise a smaller relative share of the Tennessee economy than the national economy, and their decline and subsequent recovery over the past six months has affected national unemployment rates more than Tennessee unemployment rates.

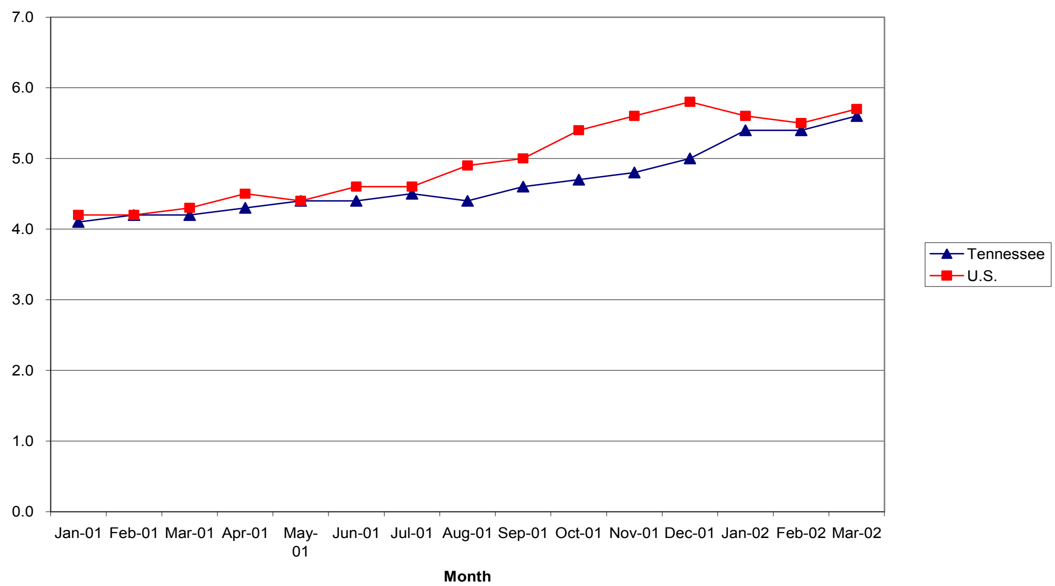
The unemployment rate can be deceptive because it measures the number of people holding jobs compared to the total labor force. The labor force does not include unemployed people who are not looking for jobs. Thus, dramatic changes in the number of

Nonagricultural Job Growth: 2000-2003 CBER Forecast				
	2000	**2001**	**2002**	**2003**
Tennessee	1.9%	0.6%	0.2%	1.5%
U.S.	2.2%	0.4%	-0.4%	1.0%

Exhibit 15

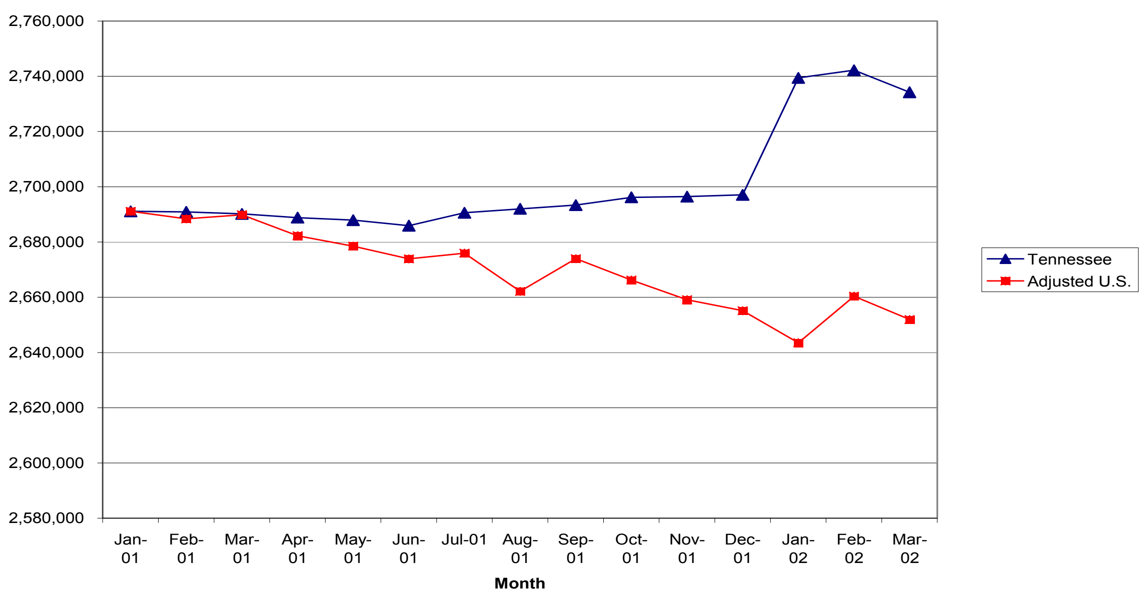
unemployed people in the job market can have a significant impact on the unemployment rate. Exhibits 16 and 17 show how unemployment in Tennessee has risen and is approaching the U.S. rate. Yet, job growth is positive, in contrast to U.S. job growth in recent months.

Exhibit 16: Seasonally-Adjusted Unemployment Rate



Source: Tennessee Department of Labor and Workforce Development, Public Information Office

Exhibit 17: Seasonally-Adjusted Employment Levels

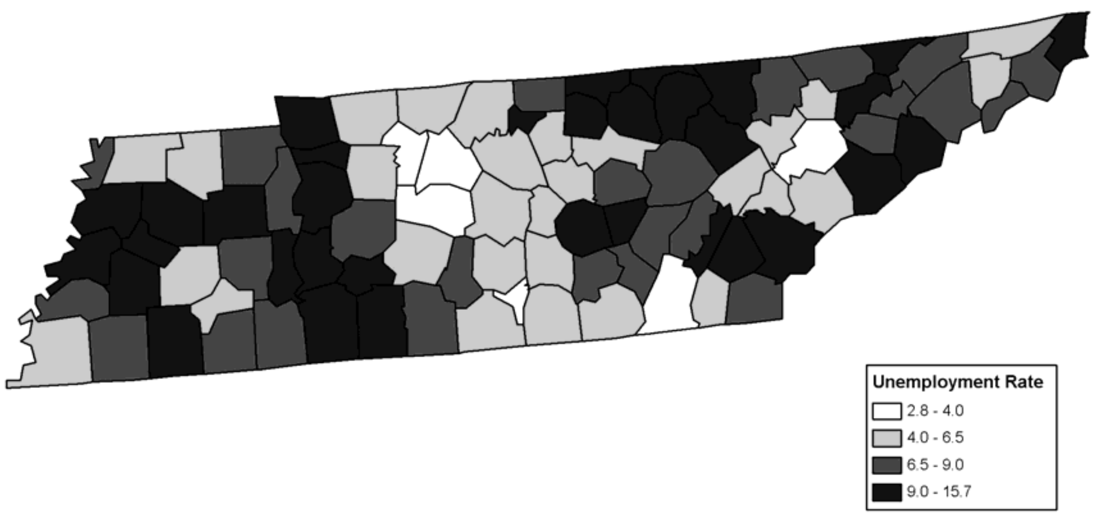


Source: Tennessee Department of Labor and Workforce Development, Public Information Office

CBER correctly projected negative national job growth in the first quarter of 2002 but was incorrect in predicting that Tennessee would also have negative employment growth for that quarter. Based on other economic forecasts and the early stages of the national economic recovery, it appears nonagricultural job growth in 2002 in both Tennessee and the U.S. will exceed CBER's forecasts.

Looking at state totals can mask disparities among local areas. Exhibit 18 shows average unemployment rates in Tennessee counties for January and February 2002. The statewide average unemployment for those two months was 5.4 percent. The highest average unemployment statewide was in Scott County, which had 15.6 percent unemployment. It was followed by Houston, Sevier, Stewart, Cocke, Fentress, and Johnson Counties, all above twelve percent. Moore County had the state's lowest unemployment at 2.8 percent.

Exhibit 18: Winter 2002 Unemployment

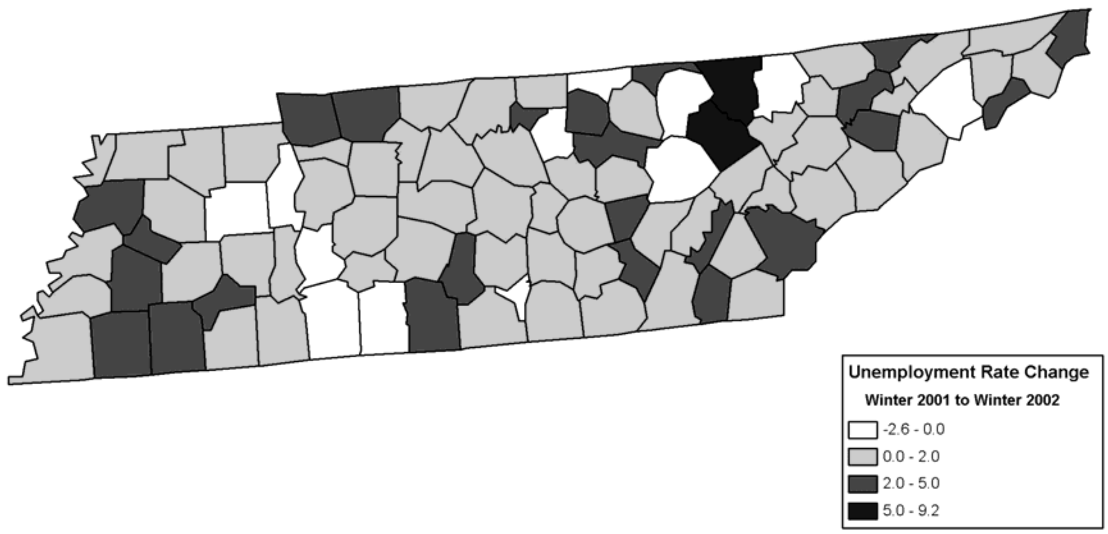


Source: Tennessee Department of Labor and Workforce Development, Public Information Office

Exhibit 19 shows the change in average unemployment from the January/February 2001 to January/February 2002. Twelve Tennessee counties experienced declines in the unemployment rate, although the only significant declines were Wayne County (2.6 percent) and Jackson County (1.8 percent). The unemployment rate increased over 1.5 percent in forty Tennessee counties. The largest increases were in Scott County

(9.2 percent), Morgan County (5.4 percent), and Van Buren County (4.0 percent). Statewide, the unemployment rate increased 1.2 percent.

Exhibit 19: Unemployment Rate Change for Past Year



Source: Tennessee Department of Labor and Workforce Development, Public Information Office

Recent Economic Developments

In the first half of 2001, economists already noted recessionary trends in the national and state economies. A presentation by the chief economist of Economy.com in May 2001 pointed to recessionary levels of unemployment and "soaring" bankruptcy filings nationally. He also placed Tennessee among a handful of states that had already entered recessions.[3] The events of September 11, 2001 exacerbated an already declining economy, creating immediate and long-term disruptions. CBER projects that Tennessee will come out of its recession ahead of the country as a whole later this year. National indicators suggest that the country as a whole has come out of the recession, although some individual states and industries remain depressed.

In its January 2002 report, CBER projected nominal GDP would grow 2.1 percent this year, and Tennessee GSP growth would outpace the national trend at 3.2 percent. CBER based these estimates on the expectation that economic growth would be negative or flat during the

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[3] Mark Zandi, "The Economic Outlook," May 2001.

first quarter of 2002 but would accelerate throughout the year. CBER expected this trend to produce modest annual growth for 2002 and set the stage for continued economic expansion in 2003. This perspective appeared reasonable and was widely held by economic experts at the time of the report's release.

Since that time, economic growth has accelerated at a pace few anticipated. Seasonally-adjusted real GDP growth for the first quarter of 2002 was 1.4 percent. CBER had projected a decline of 1.6 percent. The Institute for Supply Management (ISM) manufacturing index has now risen for five consecutive months. Construction spending has also rebounded from lows experienced last fall. In 2002, the ISM non-manufacturing index reached its highest level in two years. Any reading above 50 indicates economic expansion. In March, the index fell to 55.6 and in April to 53.9, still showing growth in the service sector. Consumer confidence in March rose to its highest point since August 2001, declining slightly in April. In light of this relatively positive economic news, some companies have revised earnings expectations upward and have begun hiring again. All three major U.S. stock indices are well above last fall's lows although they are still below levels they attained last spring.

While most current economic news is promising, the recent spike in oil prices has created some downward pressure on the U.S. economy. Oil prices have risen almost 40 percent since their lows during the end of 2001. A cut in production by OPEC is partially to blame for the increase. However, uncertainty created by sustained violence in the Middle East and fears that several major oil-producing nations could cut oil supply as a political statement in the Israeli-Palestinian conflict have also driven prices to their current levels. Although that scenario appears unlikely, oil prices appear to be linked to the stability of the political situation in Israel and the areas controlled by the Palestinian Authority. However, the U.S. economy has become much less dependent on oil in recent decades, and the effect of high oil prices on overall economic growth is not nearly as significant as it was in the 1970s. Furthermore, the Federal Reserve usually begins to increase interest rates during an economic recovery to stem inflation. If oil prices do not fall, the Federal Reserve can promote continued economic growth by slowing this increase. Thus, high oil prices may not significantly impede economic growth during 2002.

Implications for the State Budget

Fiscal Year 2001 Tennessee Tax Revenues		
Tax	**Amount (in millions)**	**Percent of all taxes**
Sales and Use	$4,643	61%
Franchise & Excise	$1,103	14%
Gas Taxes	$804	11%
Motor Vehicle	$222	3%
Gross Receipts	$249	3%
Hall Income	$199	3%
Alcohol & Tobacco	$163	2%
Privilege	$161	2%
Other	$112	1%

Exhibit 20

Increased economic growth could have a significant impact on several components of the Tennessee tax base. Exhibit 20 lists major taxes in Tennessee and their share of state revenues in FY2001. Renewed economic growth and increased corporate profits should produce meaningful growth in excise tax revenues in the coming year. However, franchise tax revenue decreases brought about by accelerated depreciation in recent federal economic stimulus legislation could overwhelm those gains. Earnings from the Hall income tax could increase from increased dividends, higher interest rates, and higher capital gains in mutual funds, but these increases would come in April 2003.

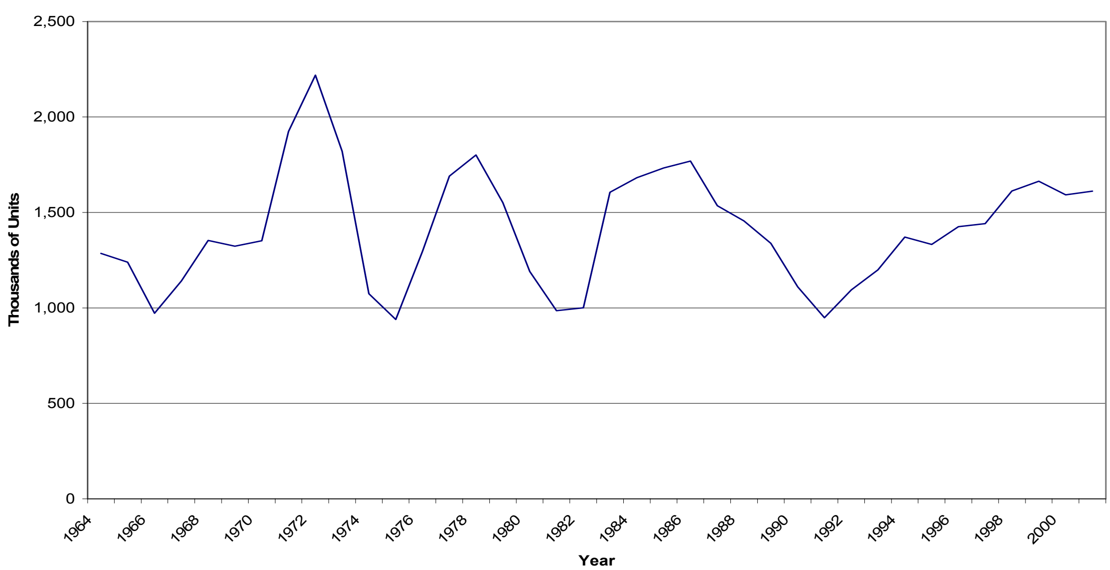
Gasoline consumption traditionally follows overall economic growth patterns. The U.S. Department of Energy projects an average summer gasoline price of $1.46 per gallon, the third highest average price in history but a decline from 2000 and 2001. Assuming gasoline prices remain stable or decline, revenue from the gasoline and motor fuel taxes should exhibit growth over the coming year.

Sales tax revenues in Tennessee should also exhibit positive growth in 2002 but will likely lag well behind overall economic growth. Two factors should dampen sales tax growth even in the midst of an economic recovery. First, sales tax losses to e-commerce are increasing. The result is that the elasticity of the sales tax, already low, is decreasing. CBER's updated estimates of the next decade's sales tax losses caused by electronic commerce are substantial.

Second, relatively slow growth in the sectors that drive the sales tax should also undermine revenue growth in the coming year. Consumer spending on housing and durable goods has traditionally flattened or declined during recessions. Increased growth in these areas has driven recoveries. As seen in Exhibits 21 and 22, these trends were quite noticeable in the 1974, 1979, 1981, and 1991 recessions. In contrast, consumer spending on durable goods surged in fall 2001 as consumers took advantage of zero percent financing for new car purchases. Exhibit 23 shows that both the regional and national housing markets have remained buoyant for the past two years. The surprising strength of these markets over the past year has dampened the impact of the recession on state sales tax revenues. However, as a result, growth in the housing and durable goods markets will likely fall below that found in previous recoveries. Long-term demographic trends and the probability of rising interest rates could also impede growth in the Tennessee housing market.

In contrast to stable household consumption, business investment declined markedly in 2001. Because of this, many economists have labeled the 2001 recession a business recession, and most predict increasing business investment will lead the economic recovery. Yet, business-to-business transactions account for over ninety percent of e-commerce sales taxes losses.[4] Thus, a surge in business investment will not bring a proportional increase in state tax revenue. Furthermore, following a trend firmly established in the past decade, CBER projects the service and FIRE[5] sectors to lead Tennessee's economic growth in 2002. The sales tax will not capture most of this economic growth.

Exhibit 21: New U.S. Housing Permits



Source: U.S. Department of Commerce, Bureau of the Census

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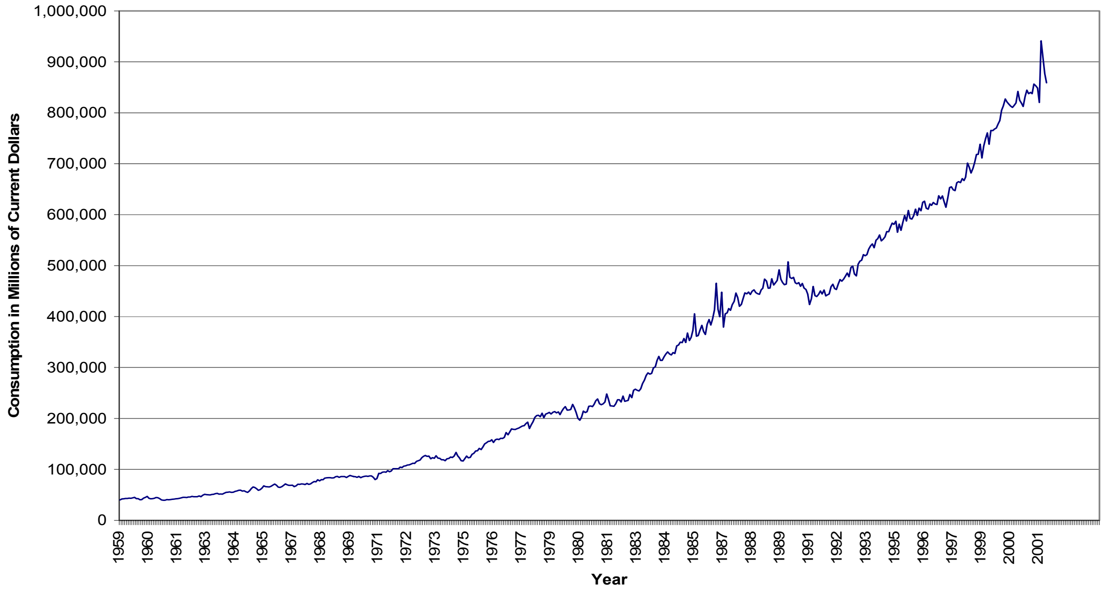
[4] Donald Bruce and William F. Fox, "State and Local Sales Tax Revenue Losses from E-Commerce: Updated Estimates," Center for Business and Economic Research, University of Tennessee, September 2001.

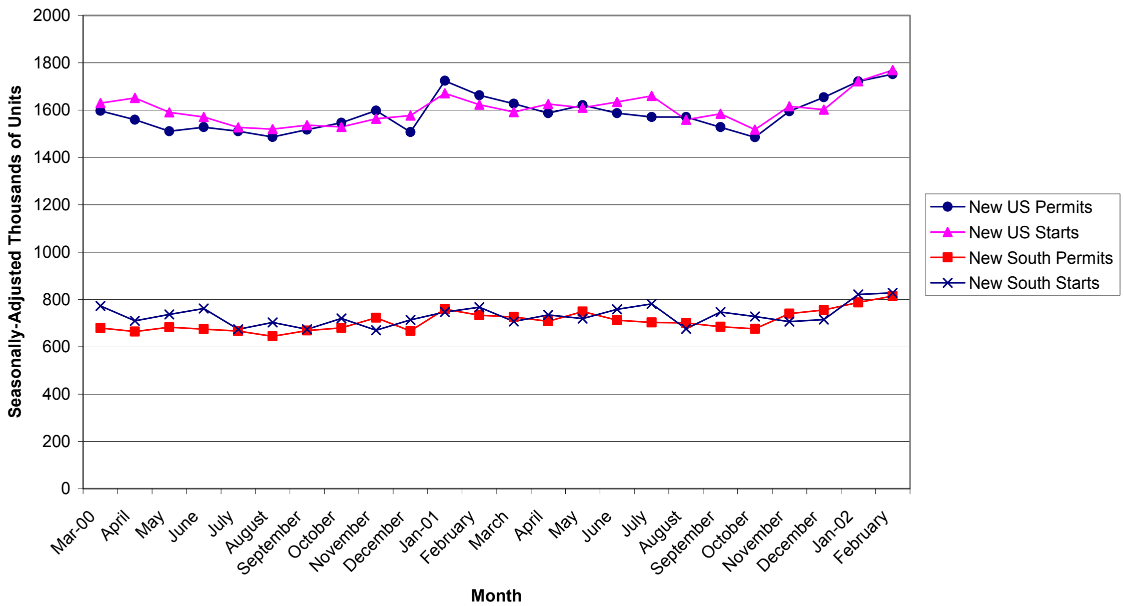
[5] Finance, Insurance, and Real Estate

Exhibit 22: U.S. Durable Goods Consumption



Source: U.S. Department of Commerce, Bureau of Economic Analysis

Exhibit 23: National and Regional Housing Market Conditions



Source: U.S. Department of Commerce, Bureau of the Census

Conclusions

CBER projected that, after a contraction stretching from last fall through the first quarter of 2002, GDP would grow through the rest of the calendar year. This forecast appeared reasonable in early January. Since that time, major economic indicators have been mixed but have outperformed most predictions from late 2001. Together, they paint a picture of slow current economic growth and stronger growth over the coming year. CBER may have slightly underestimated economic growth measured in GDP and GSP, although its forecasts for personal income growth are in line with most current forecasts and appear reasonable.

CBER projected nominal taxable sales growth of 0.5 percent for 2002, a growth rate well below historic standards. Included in this projection was an estimate of 0.3 percent growth in the first quarter over last year. State sales tax revenues from January through March actually grew 0.8 percent. Because personal consumption remained relatively strong over the past year, it is unlikely that consumption will grow rapidly in this year's recovery. Internet sales will likely erode much of the increase in business spending over the next year. Thus, while overall economic growth will likely outpace CBER's projections, CBER's projection of slow taxable sales growth still appears reasonable.

Appendices

Appendix A: Statutory Requirements

Tennessee Constitution
Article II, §24 (excerpt)

In no year shall the rate of growth of appropriations from state tax revenues exceed the estimated rate of growth of the state's economy as determined by law.

TCA §9-4-5201

(a) The estimated rate of growth of the state's economy shall be based upon the projected change in Tennessee personal income.

(b) Tennessee personal income shall consist of those sources of income included in the United States department of commerce's definition of "personal income."

TCA §9-4-5202

(a) At least once each year, and whenever requested to do so by the commissioner of finance and administration or by the joint request of the chairs of the finance, ways and means committees of the senate and house of representatives, the state funding board shall secure from the Tennessee econometric model a report of the estimated rate of growth of the state's economy. Such report shall include the major assumptions and the methodology used in arriving at such estimate.

(b) Upon receiving the report specified in subsection (a), the state funding board shall make comments relating to the reasonableness of the estimate, including any different estimate the board deems necessary. The board shall also enclose a list identifying state tax revenue sources and non-tax revenue sources, approved by the attorney general and reporter. The department of finance and administration shall provide to the board revenue estimates for each source.

(c) In the event data from Tennessee econometric model is unavailable, the funding board, after consulting with the finance, ways and means committees of the senate and house of representatives, shall obtain and/or prepare a report of the estimated rate of growth of the state's economy.

(d) The reports specified in subsections (a), (b) and (c) shall be forwarded to the commissioner of finance and administration and to each member of the general assembly, after review and definitive comment by the finance, ways and means committees of the senate and house of representatives.

(e)(1) In November of each year, the state funding board shall conduct public hearings to develop consensus estimates of state revenue for the upcoming fiscal year, as well as any revisions to the current fiscal year estimates, as the board deems appropriate.

(2) The funding board shall request economic forecasts and revenue estimates from representatives of state higher education institution business centers located in each of the grand divisions and such other groups or persons as the funding board deems appropriate.

(3) On December 1, or as soon thereafter as practical, the funding board shall present its state revenue estimates, along with a summary of the economic forecast upon which the estimates are based, to the governor and the chairs of the senate and house finance, ways and means committees. If, in the opinion of the funding board, circumstances warrant a review of state revenue estimates it has previously presented, or upon a request of the chairs, the funding board shall consider information it deems necessary and appropriate and may revise its state revenue estimates if appropriate. Any revision to its revenue estimates and reasons therefore shall be forwarded to the governor and chairs.

TCA §9-4-5203 (excerpt)

(c) When in any budget document the percentage increase of recommended appropriations from state tax revenues exceeds the percentage increase of estimated Tennessee personal income as defined in § 9-4-5201, for the ensuing fiscal year, the governor shall submit a bill or bills for introduction in both houses of the general assembly which shall contain no other subject matter and shall set forth the dollar and percentage by which the estimated growth of the state's economy is exceeded by the appropriations of state tax revenue in accordance with article II, § 24 of the Constitution of Tennessee.

(d) When the percentage increase of appropriations of state tax revenue by the general assembly exceeds the percentage increase of estimated Tennessee personal income as defined in § 9-4-5201, for the ensuing fiscal year, the general assembly shall by law containing no other subject matter, set forth the dollar and the percentage by which the estimated growth of the state's economy is exceeded by the appropriations of state tax revenue in accordance with article II, § 24 of the Constitution of Tennessee.

Appendix B: Years in which Appropriations have Exceeded Growth in Nominal Personal Income[6]

Fiscal Year 1984-1985	$396,100,000	14.60 %
Fiscal Year 1985-1986	$58,000,000	1.79 %
Fiscal Year 1986-1987	$100,000,000	2.76 %
Fiscal Year 1988-1989	$101,000,000	2.38 %
Fiscal Year 1989-1990	$74,000,000	1.59 %
Fiscal Year 1991-1992	$703,100,000	15.09 %
Fiscal Year 1992-1993	$450,000,000	8.69 %
Fiscal Year 1996-1997	$55,000,000	0.84%
Fiscal Year 1999-2000	$189,000,000	2.13%
Fiscal Year 1999-2000	$81,000,000	1.00%

Appendix C: Personal Income Definition

Personal income is a measure of income received by individuals, unincorporated businesses, and non-profit organizations. While it is an important measure of economic activity, personal income is not limited to the wages and salaries of persons. For purposes of establishing this category, the Bureau of Economic Analysis of the U.S. Department of Commerce defines persons as ". . . individuals, non-profit institutions, private non-insured welfare funds, and private trust funds . . . ."

The components of personal income include:

1. wage and salary disbursements;
2. other labor income, including employer contributions for private insurance and retirement programs;
3. proprietors' income, which consists of net income of sole proprietorships and non-incorporated businesses;
4. rental income, personal interest income, dividends and royalties;
5. transfer payments by businesses and government, corporate gifts to non-profit institutions, and other payments not resulting from current services or production.[7]

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[6] Tennessee Code Annotated § 9-4-5203(e).

[7] U.S. Department of Commerce, Bureau of Economic Analysis.

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